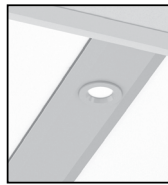


Multi-Function 2x4 | OVERBED RECESSED



SECTION VIEW



(RD) Reading light shown



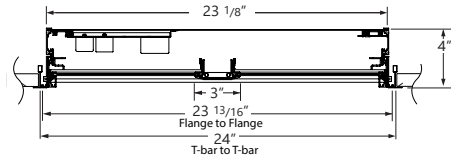
Project _____

Type _____

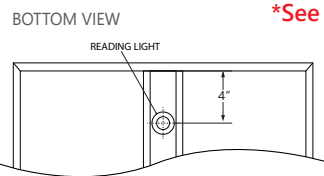
Notes _____

- BeWell light guide transitions from soft ambient to high powered exam to deliver multi-functional optics without segmented compartments, transition lines, or pixelation
- Reading light options: 3000K - 4000K
- Ambient and exam CCTs: 3000K - 4000K; Tunable White range is 2700K - 5000K
- Modular optical chamber with room-side access
- Low profile design, housing only 4" deep
- Compatible with common pillow speaker controls
- Number of circuits corresponds to number of functions; i.e., for ambient and exam, two circuits are standard; if reading light is selected, three circuits are standard (not selectable options)

***See performance chart on page 7.**



SIDE VIEW



BOTTOM VIEW



Ordering Guide

***Patent pending.**

BCMF	24	CRI	COLOR TEMP .	READING (OPT.)
PRODUCT ID	SIZE			
BCMF Multi-Function Overbed Recessed	24 2'X4' (4000lm-ambient, 14280lm-ambient+exam)	80 80 CRI 90 90 CRI*	30 3000 K 35 3500 K 40 4000 K B30 3000 K - BIOS* Ambient mode only B35 3500 K - BIOS* B40 4000 K - BIOS* TW2750 2700-5000 K - Tunable White**	RD30 3000K RD35 3500K RD40 4000K
	For Exam mode: Drivers ambient and exam are ON For ambient: Only ambient driver is ON	* Not available with BIOS	*Consult BIOS guide for more information on BIOS technology. Only available with 80 CRI. ** When TW2750 is selected, Exam CCT is 3500K Consult factory for Tunable White. Consult Axitone technical sheet for more information on color technology.	When Reading is selected a 3rd circuit is standard. Reading light CCT can differ from any color temp selected for ambient and exam functions.

FINISH	VOLTAGE	DRIVER	EMERGENCY (OPT.)
AMW antimicrobial white*	120 120 V	DP dimming (0-10V) 1%	GTD(#) generator transfer device *
W white	277 277 V	LT Lutron	+E(#) emergency section **
C custom**	347 347 V	O(#) other**	
	UNV universal	DPB(#) dimming (0-10V) 1% with BIOS*	
	DC low voltage*	TW(#) tunable white drivers (remote)*	
		POE(#) POE drivers*	
* Standard finish ** Consult factory for NSF.	* Only available with POE drivers.	* See page 3 to specify system ** Please consult factory; see page 3v	* Specify quantity, consult factory. **Specify quantity.

LV CONTROLLER (OPT.)	MOUNTING	BATTERY (OPT.)
LVC1 low voltage controller (Mode 1)	TB9 t-bar 9/16"	B(#) battery pack
LVC2 low voltage controller (Mode 2)	TB15 t-bar 15/16"	
LVC3 low voltage controller (Mode 3 step dim)	TG9 tegular 9/16"	
LVC4 low voltage controller (Mode 3 smooth dim)	TG15 tegular 15/16"	
LVC5 low voltage controller (Mode 4 step dim)	DF drywall flange	
LVC6 low voltage controller (Mode 4 smooth dim)		
Available with DP driver single CCT options only Not available with 347V Please consult factory For compatibility with control devices, such as pillow speaker handset. See wiring diagrams on page 5-6.		Not available with 347V Please consult factory

**Accessories ordered separately.
See Accessories ordering guide.**

**Optical chamber available to
order separately. See page 2.**

Multi-Function 2x4 | OVERBED RECESSED

Modular optical chamber is available as optional shelf stock for easy maintenance change-out; ordered separately.

Optical Chamber Ordering Guide

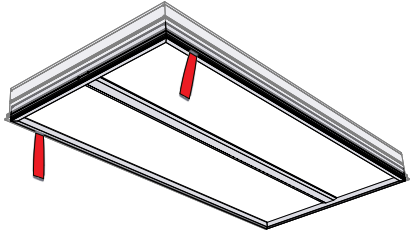
BCMF		OC24							
PRODUCT ID		SIZE		CRI		COLOR TEMP .		READING (OPT.)	
BCMF	Multi-Function Overbed Recessed	OC24	optical chamber 2'X4' (4000lm-ambient, 15600lm-ambient+exam)	80	80 CRI	30	3000 K	RD30	3000K
				90	90 CRI*	35	3500 K	RD35	3500K
						40	4000 K	RD40	4000K
						B30	3000 K - BIOS*	Ambient mode only	
						B35	3500 K - BIOS*		
		B40	4000 K - BIOS*						
						TW2750 2700-5000 K - Tunable White**			
				* Not available with BIOS		*Consult BIOS guide for more information on BIOS technology. Only available with 80 CRI. ** When TW2750 is selected, Exam CCT is 3500K Consult factory for Tunable White. Consult Axi tune technical sheet for more information on color technology.		When Reading is selected a 3rd circuit is standard. Reading light CCT can differ from any color temp selected for ambient and exam functions.	

FINISH		NA		NA		NA		NA	
		VOLTAGE		DRIVER		EMERGENCY (OPT.)		LVC (OPT.)	
AMW	antimicrobial white*	NA	not applicable	NA	not applicable	NA	not applicable	NA	not applicable
W	white								
C	custom**								
* Standard finish									
** Consult factory for NSF.									

NA		NA		NA	
MOUNTING		BATTERY (OPT.)		OTHER (OPT.)	
NA	not applicable	NA	not applicable	NA	not applicable

Optical Chamber Replacement

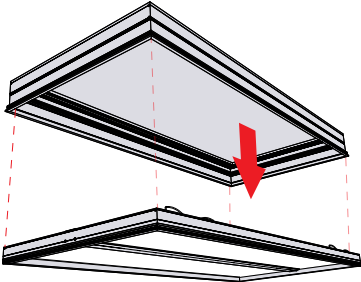
1



PRY WITH PROVIDED LENS TOOLS
FOUR CORNERS
LEVIER AVEC LES OUTILS FOURNIS
AUX QUATRE COINS


2

REPLACE OPTICAL CHAMBER
REEMPLACER LA CHAMBRE OPTIQUE



DISCONNECT WIRES FROM DRIVER
DÉBRANCHEZ LES FILS DU PILOTE

Use part # BCLTL to order lens tool as an accessory



Multi-Function 2x4 | OVERBED RECESSED

● SPECIFICATIONS

Housing	Extruded aluminum (0.065" nominal)
Central Housing	Extruded aluminum (0.065" nominal)
Side Lens	4mm PMMA light guides
Reflectors	Post painted high reflectance white
Drywall Flange Kit	Extruded aluminum (0.060" nominal)

● ELECTRICAL

Lutron driver (remote only)	LDE1 - Hi-lume 1% EcoSystem with Soft-on, Fade-to-Black *Consult factory
Other drivers** (remote only)	DALI - Digital Addressable Lighting Interface DMX - Digital Multiplex Xitanium SR - For wireless sensor
BIOS DPB drivers*	STC - BIOS control 0-10V with static spectrum and BIOS SkyBlue enabled from 100% to 1%. DCA - DynamicCare™ for Axis; BIOS control 0-10V with dynamic spectrum and BIOS SkyBlue® with Bio-Dimming™, which changes spectral qualities by removing the SkyBlue component when dimming from 100% to 51%, while light output remains relatively constant; CCT will decrease approximately 500K through bio-dimming; dimming from 50% to 1% will then reduce light output.
Tunable White TW drivers* (remote only)	DALIDT6 - DALI Type 6 (Two DALI Addresses) DALIDT8 - DALI Type 8 (One DALI Address)
Power over Ethernet POE drivers* (remote, consult factory for more information)	MOLEX IGOR SMARTENGINE O - Other (Consult factory) UL2108 certified for integral or remote driver
Emergency (remote only) Consult factory	Emergency battery pack or emergency circuit optional.
Input Voltage	120V, 277V, 347V (Remote driver only), UNV, DC.

*Choose driver from available options.

i Incorporating these components may have limitations or affect the length of the luminaire. Please contact factory for more details.

● STANDARD AND END MOUNT POWER FEED

Knockouts for BX cable connection are provided.

(BX CABLE BY OTHER)



● WEIGHT

Standard	41 lbs / 18.6 kg
Drywall with Kit	43 lbs / 19.5 kg

● LED SYSTEM

CRI	Minimum 80 or 90 color rendering index options.
CRI BIOS	Minimum 80 color rendering index with R9>75 for all CCTs.
CCT Single Color	Choice of 3000K, 3500K and 4000K color temperature with a great color consistency (within 3-step MacAdam ellipse). Both within fixture and fixture to fixture.
CCT BIOS	BIOS Static (STC) Choice of 3000K, 3500K and 4000K. BIOS SkyBlue® DynamicCare™ for Axis (DCA) Choice of 3000K, 3500K, and 4000K with Bio-Dimming™ Consult BIOS guide for more information on BIOS technology.
CCT Axitune Systems	Consult Axitune technical sheet for more information on color technology.
LED life	Minimum 50,000h with 85% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.
Thermal Management	Aluminum housing acting as the heat sink to maximize life.
Environment	For all line voltage drivers, dry and damp rated for indoor use only in ambient operating temperature of -20° to +40°C (-4° to +104°F) For POE driver option, dry and damp rated for indoor use only in ambient operating temperature of 0° to +40°C (+32° to +104°F) Consult factory for temperature outside this range.

● APPROVALS

With product features that promote cleanability and durability, Axis Lighting meets functional and application-specific industry listings such as UL, Ingress Protection (IP) and National Sanitation Foundation (NSF) standards.

● FINISH

Highly reflective, matte powder coat white paint for high efficiency. Matte texture to diffuse glare and lamp image on the surface within the optical chamber exterior. Custom finishes are also available.

● WARRANTY

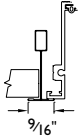
Limited 5-year warranty is available. Warranty is valid provided luminaires are installed and used according to specifications. For full terms and conditions, please consult warranty section at axislighting.com.

Multi-Function 2x4 | OVERBED RECESSED

● CEILING SYSTEM

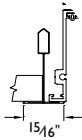
T-BAR STYLE MOUNTING

(TB9)



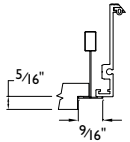
9/16" T-BAR

(TB15)



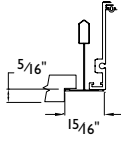
15/16" T-BAR

(TG9)



9/16" TEGULAR

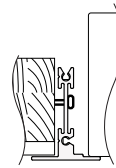
(TG15)



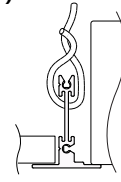
15/16" TEGULAR

i Installation sheets for all mounting options are available at:
www.axislighting.com

● DRYWALL WITH FLANGE KIT (DF)

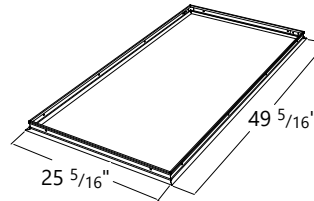


WITH WOOD FRAME



WITHOUT WOOD FRAME

● DRYWALL MOUNTING KIT



FIXTURE DIMENSIONS
47 13/16" x 23 13/16"

CUT HOLE DIMENSIONS
48 9/16" / 24 9/16"

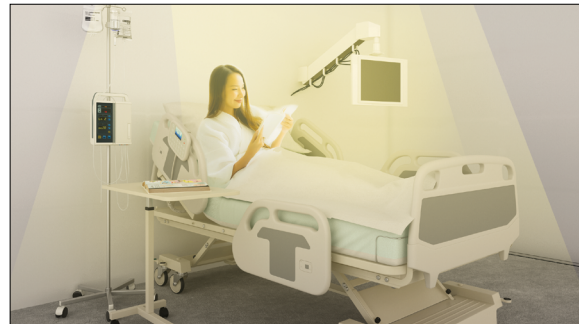
● LIGHT DISTRIBUTION ZONE CHART

OVERBED GENERAL AMBIENT



Ambient – diffuse lighting for general conversation and movement around the patient bed, recommendation is 100-200 lux at floor for area surrounding bed, 4:1 avg:min uniformity.

OVERBED EXAM



Exam – requires excellent color rendering to evaluate a patient's condition; sufficiently high, uniform light levels focused on the bed area for examination of patients from head to foot. Provides recommended 500-1000 lux at 36" AFF, 2:1 avg:min uniformity.

OVERBED READING



Reading – focused light onto a 45° inclined plane, recommendation is 400-800 lux on horizontal when patient is in an elevated reading position, 3:1 avg:min uniformity.

NIGHT CHECK



Night check – light levels dimmed low enough for staff to check on patients during the night without waking them from sleep, recommendation is 30 lux at 36" above finished floor (AFF).

Multi-Function 2x4 | OVERBED RECESSED

● LOW VOLTAGE CONTROLLERS - CONFIGURATIONS

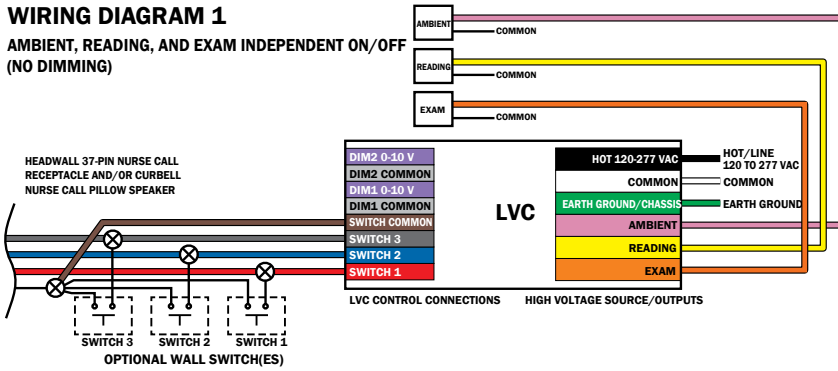
		MODE #1 (DEFAULT)	MODE #2	MODE #3		MODE #4	
		Ambient Light and Reading Light Independent (ON/OFF), Exam Light LVC1 Option	Ambient Light and Reading Light Sequential, Exam Light LVC2 Option	Ambient Light Dimming, Reading Light Independent (ON/OFF), Exam Light		Ambient Light and Reading Light Dimming, Exam Light	
				Step Dimming (one direction) LVCD3 Option	Smooth Dimming (two direction) LVCD4 Option	Step Dimming (one direction) LVCD5 Option	Smooth Dimming (two direction) LVCD6 Option
Toggling Switch 1 (Pillow Speakers, wall switch) affects Ambient Light as follows:	First Toggle	Ambient ON	Ambient ON, Reading Light OFF	Ambient ON, Full brightness	First toggle: Ambient ON, dim level set to Approx. 100% brightness Subsequent sustained presses: smooth dimming* Second toggle: Ambient OFF	Ambient ON, Full brightness dimming	First toggle: Ambient ON, dim level set to Approx. 100% brightness Subsequent sustained presses: smooth dimming* Second toggle: Ambient OFF
	Second Toggle	Ambient OFF	Ambient OFF, Reading Light ON	Ambient ON, Approx. 60% (4 VDC) brightness		Ambient ON, Approx. 60% (4 VDC) brightness	
	Third Toggle	-	Ambient ON, Reading Light ON	Ambient ON, Approx. 30% (1.37 VDC) brightness		Ambient ON, Approx. 30% (1.37 VDC) brightness	
	Fourth Toggle	-	Ambient OFF, Reading Light OFF	Ambient ON, Approx. 10% (0.8 VDC) brightness		Ambient ON, Approx. 10% (0.8 VDC) brightness	
	Fifth Toggle	-	-	Ambient OFF		Ambient OFF	
Toggling Switch 2 (Pillow Speakers, wall switch) affects Reading Light as follows:	First Toggle	Reading Light ON	-	Reading ON	Reading ON	Reading ON, Full brightness	First toggle: Reading ON, dim level set to Approx. 100% brightness Subsequent sustained presses: smooth dimming* Second toggle: Reading OFF
	Second Toggle	Reading Light OFF	-	Reading OFF	Reading OFF	Reading ON, Approx. 60% (4 VDC) brightness	
	Third Toggle	-	-	-	-	Reading ON, Approx. 30% (1.37 VDC) brightness	
	Fourth Toggle	-	-	-	-	Reading ON, Approx. 10% (0.8 VDC) brightness	
	Fifth Toggle	-	-	-	-	Reading OFF	
Toggling Switch 3 (Pillow Speakers, wall switch) affects Exam Light as follows:	First Toggle	Ambient and Exam maximum brightness	Ambient and Exam maximum brightness	Ambient and Exam maximum brightness	Ambient and Exam maximum brightness	Ambient and Exam maximum brightness	Ambient and Exam maximum brightness
	Second Toggle	Ambient returns to previous setting, Exam OFF	Ambient returns to previous setting, Exam OFF	Ambient returns to previous setting, Exam OFF	Ambient returns to previous setting, Exam OFF	Ambient returns to previous setting, Exam OFF	Ambient returns to previous setting, Exam OFF

Multi-Function 2x4 | OVERBED RECESSED

● LOW VOLTAGE CONTROLLERS WIRING DIAGRAMS

WIRING DIAGRAM 1

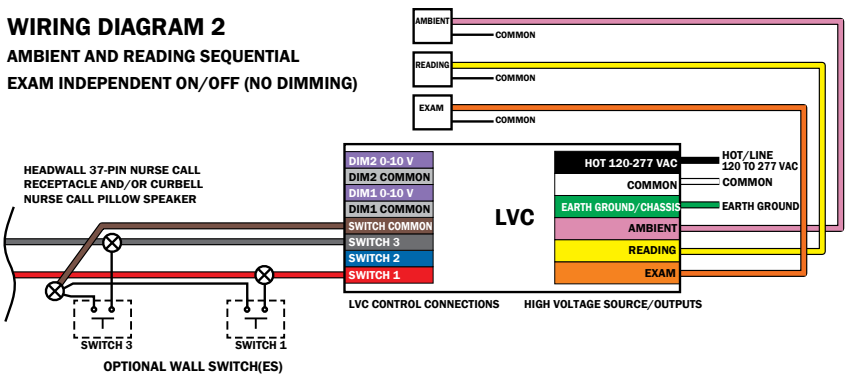
AMBIENT, READING, AND EXAM INDEPENDENT ON/OFF (NO DIMMING)



1. LVC Mode 1 (independent ON/OFF no dimming, EXAM mode on switch 3) DEFAULT mode.

WIRING DIAGRAM 2

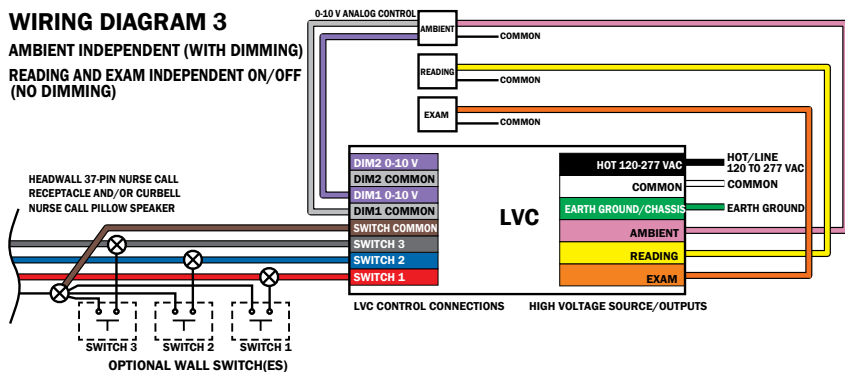
AMBIENT AND READING SEQUENTIAL EXAM INDEPENDENT ON/OFF (NO DIMMING)



2. LVC Mode 2 (sequential ON/OFF no dimming, EXAM mode on switch 3)

WIRING DIAGRAM 3

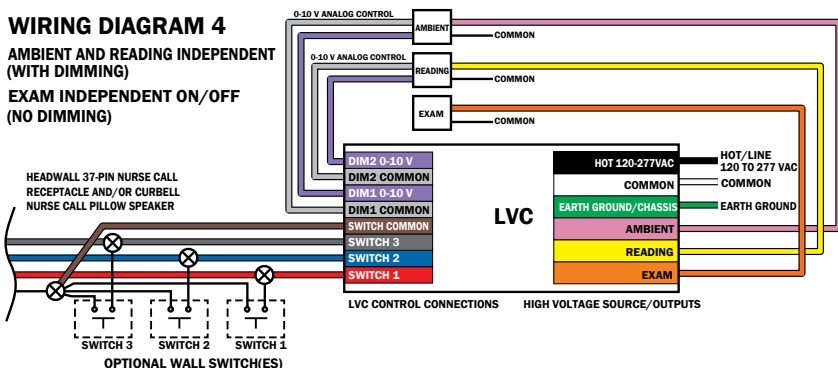
AMBIENT INDEPENDENT (WITH DIMMING) READING AND EXAM INDEPENDENT ON/OFF (NO DIMMING)



3. LVCD Mode 3 step dimming (Ambient dimming, Reading Light ON/OFF, EXAM mode on switch 3)
4. LVCD Mode 3 smooth dimming (Ambient dimming, Reading Light ON/OFF, EXAM mode on switch 3)

WIRING DIAGRAM 4

AMBIENT AND READING INDEPENDENT (WITH DIMMING) EXAM INDEPENDENT ON/OFF (NO DIMMING)

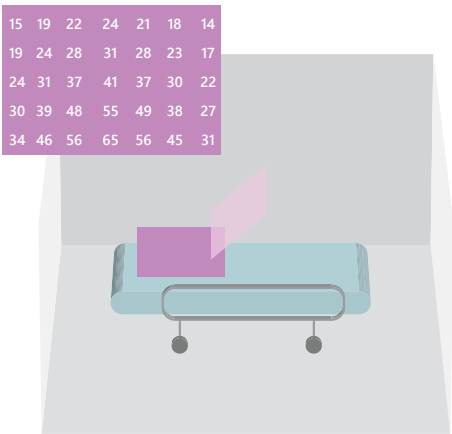
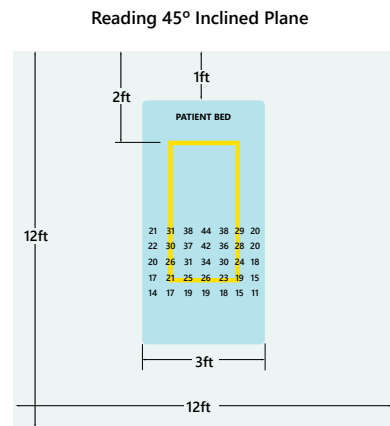
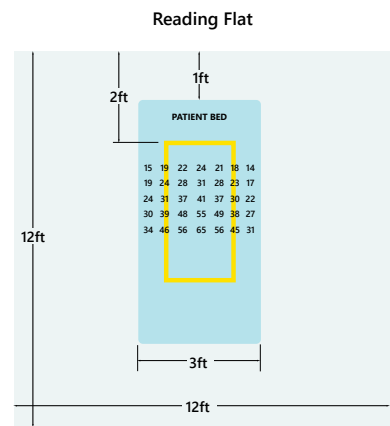
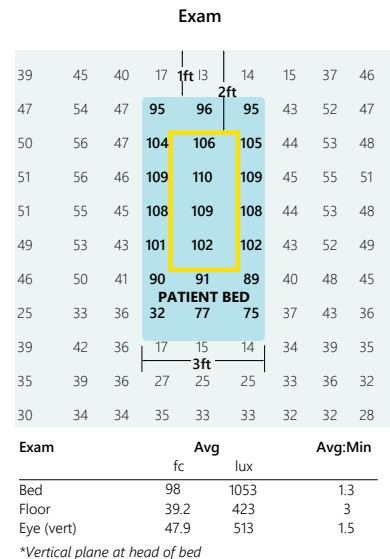
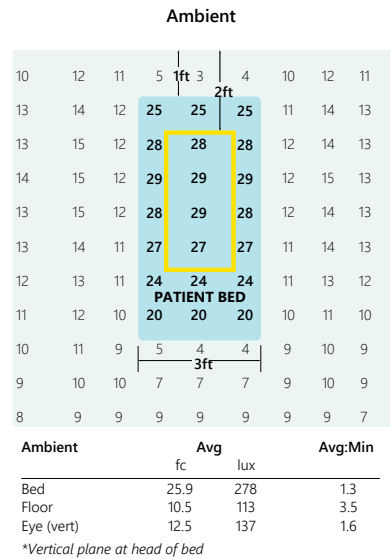


5. LVCD Mode 4 step dimming (Ambient and Reading Light dimming, EXAM mode on switch 3)
6. LVCD Mode 4 smooth dimming (Ambient and Reading light dimming, EXAM mode on switch 3)

Multi-Function 2x4 | OVERBED RECESSED

RECOMMENDED LAYOUT PHOTOMETRICS SPREAD

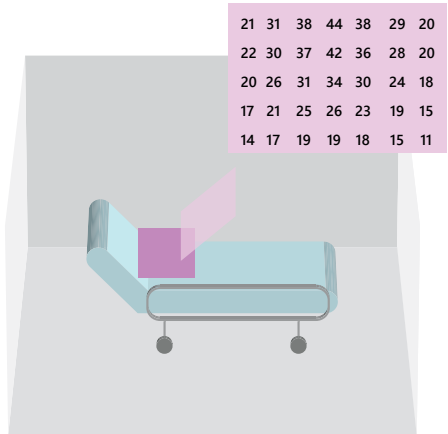
The following illustrations depict calculations performed at 9' ceiling height, and meet recommended industry standards for illuminance and uniformity.



Flat horizontal plane (2' x 3')

BCMF Reading Light Option 1, as shown above
Luminaire at 2'-0" from headwall
Light at 2'-4" from headwall

	Avg	Avg:Min
	fc	lux
Flat Bed	33	353
45° Inclined Plane	25	268



Raised Bed w 45° inclined

BCMF Reading Light Option 2, not shown
Luminaire at 2'-2" from headwall
Light at 2'-6" from headwall

	Avg	Avg:Min
	fc	lux
Flat Bed	41.3	442
45° Inclined Plane	23.4	250

Multi-Function 2x4 | OVERBED RECESSED

PERFORMANCE AT 3500K

FUNCTION	NOMINAL LUMEN OUTPUT	INPUT WATTS*	EFFICACY	Estd. L85 LED Life (hrs.)
AMBIENT	4000 lm	33.8 W	113 lm/W	50000, min
AMBIENT & EXAM	14300 lm	204 W	70 lm/W	50000, min
READING*	1366 lm	13.66 W	100 lm/W	50000, min

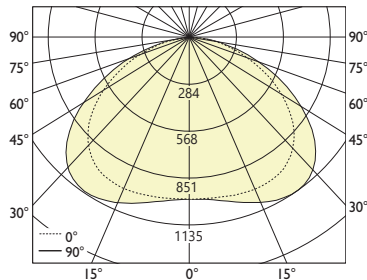
Please consult factory for custom lumen output and wattage.

* Reading Light at 3000K.

● PHOTOMETRIC DATA

PHOTOMETRIC CURVE

Ambient



Luminaire Lumens: 3819 lm
Input Watts: 33.8 W
Efficacy: 113 lm/W
 IES FILE: BCM-24-80-35-W-120-D.IES

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	957	957	957	957	957
5	959	960	961	961	962
15	968	973	988	1005	1011
25	974	989	1029	1070	1086
35	950	976	1040	1106	1135
45	859	893	969	1049	1086
55	688	719	788	861	896
65	463	485	534	582	607
75	236	248	272	292	303
85	58	60	58	51	49
90	2	2	3	4	5

ZONAL LUMENS

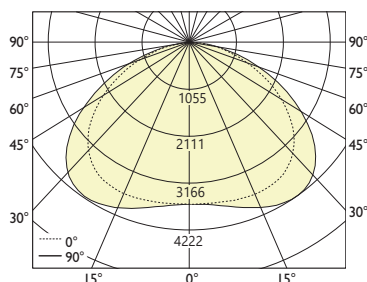
Zone	Lumens
0	
0-10	92
10-20	282
20-30	477
30-40	651
40-50	744
50-60	699
60-70	522
70-80	283
80-90	69
90	

LUMINANCE DATA (cd/m²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	1842	2079	2328
55	1819	2084	2368
65	1660	1914	2178
75	1381	1593	1776
85	1014	1015	861

PHOTOMETRIC CURVE

Ambient & Exam



Luminaire Lumens: 14280 lm
Input Watts: 204 W
Efficacy: 70 lm/W
 IES FILE: BCMF-24-80-35-W-120-D.ies

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	3646	3646	3646	3646	3646
5	3641	3646	3653	3660	3662
15	3676	3695	3749	3810	3834
25	3697	3744	3876	4015	4078
35	3602	3674	3874	4085	4188
45	3255	3335	3559	3802	3928
55	2602	2665	2854	3067	3186
65	1753	1785	1910	2049	2134
75	899	906	961	1018	1060
85	219	205	201	195	199
90	7	7	8	9	10

ZONAL LUMENS

Zone	Lumens
0	
0-10	351
10-20	1070
20-30	1804
30-40	2443
40-50	2769
50-60	2586
60-70	1931
70-80	1055
80-90	271
90	

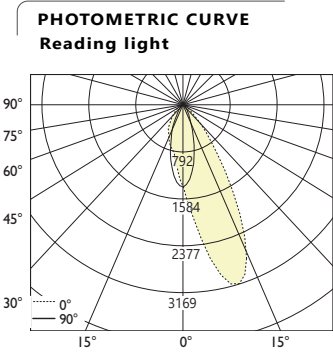
LUMINANCE DATA (cd/m²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	7030	7687	8484
55	6928	7600	8482
65	6333	6903	7713
75	5306	5673	6256
85	3839	3529	3495

i All IES files are available for download at: www.axislighting.com

Multi-Function 2x4 | OVERBED RECESSED

● PHOTOMETRIC DATA



Luminaire Lumens: 1366 lm
Input Watts: 13.66 W
Efficacy: 100 lm/W
IES FILE: BCM-22-80-35-RD-W-120-D-2.ies

TESTED ACCORDING TO IES LM-79-2008

CANDELA DISTRIBUTION					
Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	1391	1391	1391	1391	1391
5	1915	1786	1585	1402	1267
15	3136	2379	1454	941	701
25	2472	1647	869	468	270
35	1017	721	417	186	121
45	327	265	163	72	55
55	106	92	64	30	32
65	31	29	25	18	19
75	12	12	11	10	10
85	3	3	3	2	3
90	0	1	1	1	1

ZONAL LUMENS	
Zone	Lumens
0	
0-10	131
10-20	354
20-30	387
30-40	253
40-50	130
50-60	66
60-70	29
70-80	12
80-90	3
90	

i All IES files are available for download at: www.axislighting.com